Applicant: George Shih, et al.
Serial No.: 10/684,718
Attorney Docket No.: B1044317(202-0587)

IN THE CLAIMS

Please amend claims 1, 7 and 9 as follows.

PAGE 4/16 * RCVD AT 4/13/2006 3:03:04 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-2/11 * DNIS:2738300 * CSID:12485404035 * DURATION (mm-ss):04-26

Applicant: George Shih, et al.
Serial No.: 10/684,718
Attorney Docket No.: 81044317(202-0587)

LISTING OF CLAIMS

1. (Currently amended) A method of readying a fuel cell cooling circuit for use, comprising:

(A) flushing the cooling circuit by distributing coolant from a coolant storage tank to a holding tank and from the holding tank to the cooling circuit to remove contaminants from the cooling circuit; and,

(B) filling the cooling circuit with a volume of fresh coolant after step (A) has been completed.

2. (Original) The method of Claim 1, wherein step (A) is performed by circulating a volume of coolant between the cooling circuit and a supply of the coolant external to said cooling circuit.

3. (Original) The method of Claim 2, wherein step (A) includes filtering the circulating coolant at a location external to the cooling circuit.

4. (Original) The method of Claim 3, wherein the filtering includes passing the coolant through a particulate filter and a de-ionization filter.

5. (Original) The method of Claim 1, including the step of heating the coolant circulated to the cooling circuit.

6. (Original) The method of Claim 2, including the step of controlling the pressure of the coolant circulated to the cooling circuit to maintain the pressure within a desired pressure range.

PAGE 5/16 * RCVD AT 4/13/2006 3:03:04 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-2/11 * DNIS:2738300 * CSID:12485404035 * DURATION (mm-ss):04-26

7. (Currently amended) The method of Claim 2, further comprising a filter connected to said cooling circuit and a shutoff valve between said cooling circuit and said filter and including the step of blocking the flow of coolant to ~~a~~ said filter ~~in the cooling system~~ by closing said shutoff valve until step (A) is complete.

8. (Original) The method of Claim 2, wherein step (A) includes removing the coolant from the cooling circuit after step (A) has been completed.

9. (Currently amended) A method of readying a fuel cell cooling circuit for use, comprising:

(A) connecting the cooling circuit to an external coolant flushing system having a coolant storage tank and a pressurized holding tank connected to the coolant storage tank for flushing the cooling circuit;

(B) circulating a volume of coolant ~~between the flushing system and~~ from the coolant storage tank to the pressurized holding tank and from the pressurized holding tank to the cooling circuit, the flow of coolant through the cooling circuit resulting in the removal of contaminants from component parts of the cooling circuit;

(C) removing contaminants from the coolant as the coolant circulates through the flushing system; and,

(D) disconnecting the cooling circuit from the flushing system after the cooling circuit has been flushed.

10. (Original) The method of Claim 9, including the step of removing the coolant from the cooling circuit before the cooling circuit is disconnected from the flushing system.

PAGE 6/16 * RCVD AT 4/13/2006 3:03:04 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-2/11 * DNIS:2738300 * CSID:12485404035 * DURATION (mm-ss):04-26

11. (Original) The method of Claim 9, wherein the volume of coolant is a fixed volume, and the coolant is circulated between the cooling circuit and the flushing system for a preselected time period.

12. (Original) The method of Claim 9, including the step of blocking the flow of coolant to a coolant filter in the cooling circuit while step (B) is being performed, whereby contaminants are prevented from accumulating in the coolant filter until the cooling circuit has been readied for use.

13. (Original) The method of Claim 9, wherein step (C) is performed by passing the coolant through at least one contaminant filter in the flushing system.

14. (Original) The method of Claim 9, including the step of heating the coolant in the flushing system to a temperature sufficient to promote the removal of the contaminants from the component parts of the cooling circuit.

15. (Original) The method of Claim 9, including regulating the pressure of the coolant circulating from the flushing system to the cooling circuit.

16. (Original) The method of Claim 9, including the step of filling the cooling circuit with fresh coolant after step (D) has been completed.

17. (Withdrawn) Apparatus for cleansing a fuel cell cooling circuit, comprising:

a flushing system connected to the cooling circuit for

PAGE 7/16 * RCVD AT 4/13/2006 3:03:04 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-2/11 * DNIS:2738300 * CSID:12485404035 * DURATION (mm-ss):04-26

flushing the cooling circuit of contaminants,

the flushing system including a supply of coolant, a filtering system for removing contaminants from the coolant flowing through the flushing system, and a pump for circulating a volume of the coolant between the cooling circuit and the flushing system.

18. (Withdrawn) The apparatus of Claim 17, wherein the filtering system includes a particulate filter and a de-ionization filter.

19. (Withdrawn) The apparatus of Claim 17, wherein the flushing system includes a pressure regulator for regulating the pressure of the coolant circulated from the flushing system to the cooling circuit.

20. (Withdrawn) The apparatus of Claim 19, wherein the pressure regulator includes a flow control valve connected between the pump and the cooling circuit for controlling the flow of coolant flowing from the flushing system to the cooling circuit.

21. (Withdrawn) The apparatus of Claim 17, including a valve system for controlling the flow of the coolant between the coolant supply, the cooling circuit and the flushing system.

22. (Withdrawn) The apparatus of Claim 17, wherein the flushing system includes a heater for heating the coolant circulated from the flushing system to the cooling circuit to a temperature sufficient to promote the removal of contaminants from component parts of the cooling circuit.

PAGE 8/16 * RCVD AT 4/13/2006 3:03:04 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-2/11 * DNIS:2738300 * CSID:12485404035 * DURATION (mm-ss):04-26

23. (Withdrawn) The apparatus of Claim 17, wherein the cooling circuit is of the type including a filter for removing contaminants from coolant flowing to the fuel cell, and wherein the apparatus further includes:

a bypass system for causing the flow of coolant to bypass cooling circuit filter when the flushing system is flushing the cooling circuit of contaminants.

24. (Withdrawn) The apparatus of Claim 17, including a controller for controlling the operation of the pump and the valve system.

25. (Withdrawn) The apparatus of Claim 17, wherein the flushing circuit is releasably connected to the cooling circuit.

PAGE 9/16 * RCVD AT 4/13/2006 3:03:04 PM [Eastern Daylight Time] * SVR:USPTO-EFXRF-2/11 * DNIS:2738300 * CSID:12485404035 * DURATION (mm-ss):04-26